

ABSTRACT OF THE DISCLOSURE

The present invention relates to a preparation method of solid titanium catalyst for olefin polymerization comprising the steps of: 1) preparing a magnesium compound solution by dissolving a magnesium halide compound into a mixed solvent of a cyclic ether and one or more of alcohol; (2) preparing a carrier by, adding a mixture of titanium compound and halogenated hydrocarbon to the magnesium compound solution at low temperature and then elevating the temperature of the resulted solution for reaction; and (3) preparing a solid titanium catalyst by reacting the carrier with a titanium compound and an electron donor.